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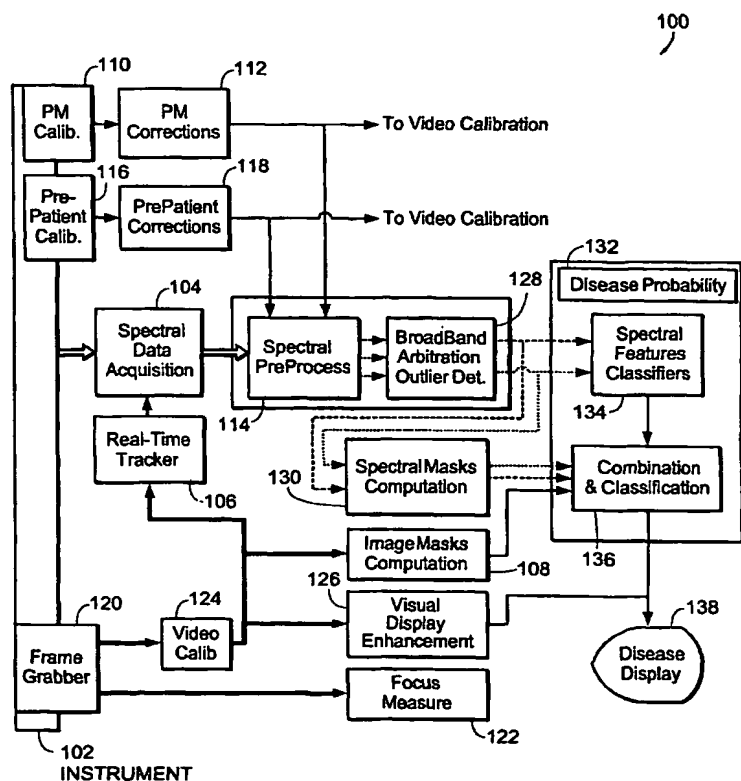
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[Continued on next page]

(54) Title: SYSTEMS FOR IDENTIFYING, DISPLAYING, MARKING, AND TREATING SUSPECT REGIONS OF TISSUE



(57) Abstract: The invention provides systems (102) for automatically localizing areas of disease within a tissue sample using fluorescence spectra, reflectance spectra, and video images (102) obtained from the sample. The invention further provides systems for displaying (138), marking, and treating the identified areas so that healthy surrounding tissue suffers minimal impact upon treatment and/or excision of the diseased tissue (104). The invention facilitates minimally-invasive treatment by accurately directing treatment to only those areas that are identified as diseased.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 9/00, 9/62; A61B 6/00
US CL : 382/128, 133, 134, 224, 133; 600/476

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 382/128, 133, 134, 224, 133; 600/476

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 6,466,687 B1 (UPPALURI et al) 15 October 2002 (15.10.2002), the entire document.	1-3, 6-9, 11-22, 24-31, 35-36, 39-45, 52, 56- 57 32-34
Y	US 6,427,082 B1 (NORDSTROM et al) 30 July 2002 (30.07.2002), the entire document.	4-5, 23, 37-38, 46-51, 53-54



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

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